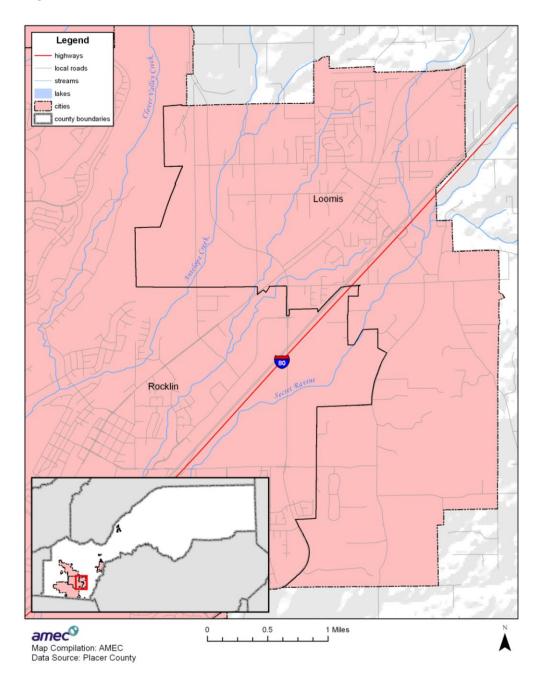


ANNEX D: TOWN OF LOOMIS

D.1 Community Profile

Figure D.1 displays a map and the location of the Town of Loomis within Placer County.

Figure D.1. The Town of Loomis



D.1.1 Geography and Climate

Loomis is a small, semi-rural community located in rapidly urbanizing western Placer County in California's Central Valley. The Town is located approximately 25 miles northeast of the Town of Sacramento, along Interstate 80. Loomis is in the western portion of the Loomis Basin, an 80-square mile area of the Placer County foothills. The town ranges in elevation from approximately 399 to 625 feet above msl and covers an area of about 7.3 square miles. Stream drainages in the area include Antelope Creek and Secret Ravine.

Interstate 80, traversing northeast through the center of Town, divides Loomis into two distinct areas. The area north of I-80 contains all the community's existing retail, office and industrial development, as well as higher density residential development, bounded by larger semi-rural residential lots. The area south of I-80 is almost exclusively rural and residential in character.

Loomis' average temperatures range from the mid 80°F to mid 90°F during the summer to the mid 30°F to high 40°F during the winter. Loomis receives an average of 36.51 inches of rain annually and only an occasional dusting of snow in the winter.

D.1.2 History

As early as 1825, trappers and hunters following the American River came into the Loomis basin. Like the beginnings of many cities in Placer County, Loomis began as a mining town, but soon became a booming center of the fruit-growing industry, supporting many packinghouses. During the 1850s miners worked along Secret Ravine and farmers and ranchers began to move into the Loomis area. The town was established in 1850, but not incorporated until 1984. The Central Pacific Railroad was constructed through Loomis in 1864. By 1872 the transcontinental link was completed and helped to expand the market for fruits, which were being produced on a commercial scale. For several years, fruit from the Loomis area was world renowned for its quality. Eventually disease destroyed many orchards established in the late 1800s and fruit production declined significantly. Today it is a very small part of the town's economy.

D.1.3 Economy

Loomis has a small employment base, with the largest employers in the office and retail sectors. According to Loomis's Housing Element, in 1999, Loomis had 2,188 jobs and projected job growth to reach 2,741 by 2005. Additional employment sectors include medical, educational, manufacturing and other.

Loomis is a community with median incomes higher than both the countywide and statewide averages. Also following this trend, the per capita income in Loomis was well above the national average.

D.1.4 Population

In 2000, the total population for Loomis was 6,427, a 10 percent increase since 1990.

D.2 Hazard Identification and Summary

Loomis' planning team identified the hazards that affect the Town and summarized their frequency of occurrence, spatial extent, potential magnitude, and significance specific to Loomis (see Table D.1). In the context of the plan's planning area, there are no hazards that are unique to Loomis.

Table D.1. Town of Loomis—Hazard Summaries

Hazard	Frequency of Occurrence	Spatial Extent	Potential Magnitude	Significance
Agricultural	Unlikely	Limited	Negligible	Low
Avalanche	Unlikely	Limited	Negligible	Low
Dam Failure	Unlikely	Limited	Negligible	Low
Drought	Unlikely	Limited	Negligible	Low
Earthquake	Occasional	Limited	Negligible	Low
Flood (100-year)	Unlikely	Limited	Critical	Medium
Flood (stormwater)	Likely	Limited	Limited	Low
Human Health Hazards				
Endemic/Pandemic				
West Nile Virus	Occasional	Limited	Negligible	Low
Landslide	Unlikely	Limited	Negligible	Low
Seiches	Unlikely	Limited	Limited	Low
Severe Weather:				
Extreme Cold/Freeze	Occasional	Limited	Negligible	Low
Extreme Heat	Occasional	Limited	Negligible	Low
Fog	Unlikely	Limited	Negligible	Low
Snow	Likely	Limited	Limited	Low
Tornado	Unlikely	Limited	Negligible	Low
Heavy Rain/ Thunderstorm/Hail/ Lightning/Wind	Likely	Limited	Limited	Low
Soil Hazards:				
Erosion	Likely	Limited	Negligible	Low
Expansive Soils	Unlikely	Limited	Negligible	Low
Volcano	Unlikely	Limited	Negligible	Low
Wildfire	Unlikely	Limited	Negligible	Low

Guidelines for Hazard Rankings

Frequency of Occurrence:

Highly Likely—Near 100 percent probability in next year

Likely—Between 10 and 100 percent probability in next year or at least one chance in ten years

Occasional—Between 1 and 10 percent probability in next year or at least one chance in next 100 years

Unlikely—Less than 1 percent probability in next 100 years

Spatial Extent:

Limited—Less than 10 percent of planning area Significant—10-50 percent of planning area Extensive—50-100 percent of planning area

Source: Town of Loomis

Potential Magnitude:

Catastrophic—More than 50 percent of area affected
Critical—25 to 50 percent
Limited—10 to 25 percent
Negligible—Less than 10 percent

Significance (subjective):

Low, Medium, High

D.3 Vulnerability Assessment

The intent of this section is to assess Loomis' vulnerability separate from that of the planning area as a whole, which has already been assessed in Section 4.3 Vulnerability Assessment in the main plan. This vulnerability assessment analyzes the population, property, and other assets at risk to hazards ranked of medium or high significance that may vary from other parts of the planning area. In addition, although ranked as low significance by the community, the wildfire hazard is also included in the below analysis. For more information about how hazards affect the County as a whole, see Chapter 4 Risk Assessment in the main plan.

D.3.1 Assets at Risk

This section identifies Loomis' assets at risk, including values at risk, critical facilities and infrastructure, historic assets, economic assets, and growth and development trends.

Values at Risk

The following data from the Placer County Assessor's Office is based on the certified roll values for 2007. This data should only be used as a guideline to overall values in the Town as the information has some limitations. The most significant limitation is created by Proposition 13. Instead of adjusting property values annually, the values are not adjusted or assessed at fair market value until a property transfer occurs. As a result, overall value information is likely low and does not reflect current market value of properties. It is also important to note that in the event of a disaster, it is generally the value of the infrastructure or improvements to the land that is of concern or at risk. Generally, the land itself is not a loss. Table D.2 shows the 2007 roll values (e.g., the values at risk) broken down by property type for Loomis.

Table D.2. 2007 Roll Values for the Town of Loomis by Property Type

Property Type	Units	Net Value
Residential	2,577	\$656,502,088
Commercial	186	\$88,635,803
Industrial	118	\$58,908,291
Agricultural	41	\$8,672,485
Total Value	2,922	\$812,718,667

Source: 2007 Certified Roll Values, Placer County Assessor's Office

Assets directly owned and controlled by the Town of Loomis include a range of properties and equipment from each department. These may include town-owned property, critical facilities and infrastructure, cultural and natural resources and others. An inventory of key town assets is provided in Table D.3. Total value of these assets exceeds \$19 million.

Table D.3. Asset Inventory- Town of Loomis

Name of Asset	Туре	Replacement Value	Occupancy/ Capacity
PC Sub station	Essential Facility	500,000	30/100
Loomis Fire	Essential Facility	5,000,000	15/40
Town Hall	High Potential Loss	2,000,000	9/50
Corp Yard	High Potential Loss	2,000,000	4/30
Del Oro High School	High Potential Loss	10,000,000	1600

Source: Town of Loomis

Critical Facilities and Infrastructure

For purposes of this plan, a critical facility is defined as: "Those services and facilities necessary during a major emergency." This definition was refined by separating out three categories of critical facilities as further described in Section 4.3.1 of the base plan. An inventory of critical facilities in the Town of Loomis from Placer County GIS is provided in Tables D.4 and D.5 and illustrated in Figure D.2. Due to the volume of data, communication infrastructure points and hydrants are not mapped and are only included in the TableD.4.

Table D.4. Town of Loomis Critical Facilities: Summary Table

Facility Type	Count
CHP Stations	1
Communication Infrastructure	4
Fire Stations	1
Hydrants	614
Police Stations	1
Public Utilities	3
Schools	3
Total	627

Source: Placer County GIS

Table D.5. Town of Loomis' Critical Facilities: Detailed Table

Туре	Class	Name	Address
CHP Stations	Class 2	South Placer Substation	6140 Horsehoe Bar Drive, Suite D
Fire Stations	Class 2	Loomis Fire Protection	5840 Horseshoe Bar Rd
Police Stations	Class 2	South Placer Substation	6140 Horsehoe Bar Drive, Suite D
Public Utilities	Class 3	South Placer Municipal Utility District	3671 Taylor Rd
Public Utilities	Class 3	Laird Pump Station	no data
Public Utilities	Class 3	Rocklin Rd 1,000,000 Gallon Tank	no data

Туре	Class	Name	Address
CHP Stations	Class 2	South Placer Substation	6140 Horsehoe Bar Drive, Suite D
Schools	Class 3	Del Oro High School	3301 Taylor Rd.
Schools	Class 3	H. Clarke Powers Elementary School	3296 Humphrey Rd.
Schools	Class 3	Loomis Elementary School	3505 Taylor Rd.

Source: Placer County GIS

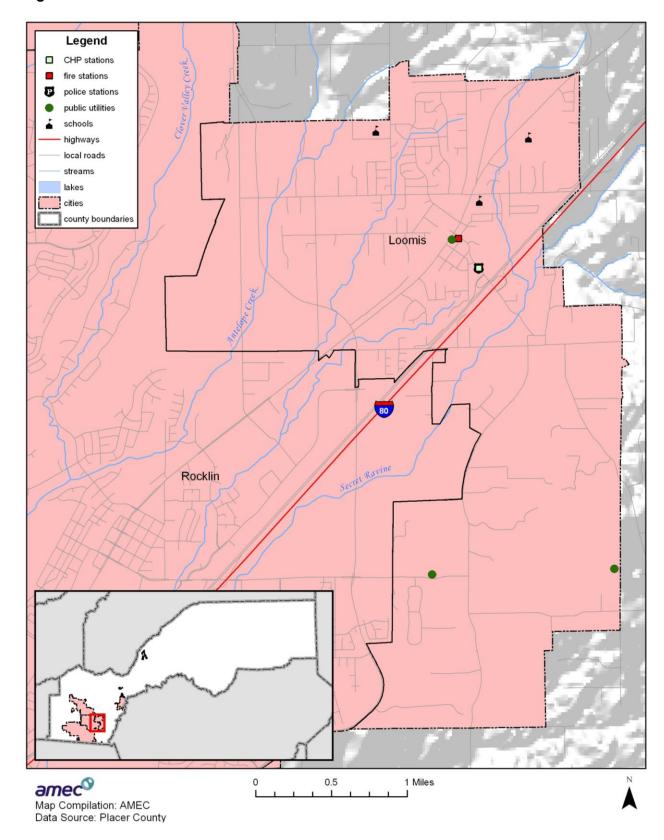


Figure D.2. Town of Loomis Critical Facilities

Natural Resources

The Town of Loomis has a variety of natural resources of value to the community:

- Three sensitive plant communities: Oak Woodland and Savannah, Riparian and Stream habitat, and Wetlands.
- No vernal pools within the Town limits, but several just outside.
- One special status animal species known to occur: the Valley Elderbery longhorn Beetle.
- One special status animal species with the potential to occur based on habitat and behavioral patterns: Cooper's Hawk, Black-Shouldered Kite, and Western Pond Turtle.

Historic Resources

The Town of Loomis does not have any registered federal historic sites.

Although Loomis does not have any sites on the National Register, there are several assets within Loomis that define the community and represent the Town's history. Some of the historical sites of importance to Loomis are listed below.

- Blue Goose (American Fruit Co.) 3550 Taylor Road
- High Hand- Loomis Fruit Growers Assoc 3750 Taylor Road
- New Town Hall of Loomis- was Bank of Loomis -3665 Horseshoe Bar Road
- Bradley House- on Barton Road
- Barton Rd. below Wells- Wells Fargo Stage stop- partial cobblestone wall
- Main Drug- built 1912 3685 Taylor Road
- Nelthorpes 3650 Taylor Road
- Christiansen's which was Law Brothers Taylor Road
- Horseshoe Bar Grill which was many different stores- 3645 Taylor Road
- Congregational Church/Koininia on Magnolia Street
- Loomis Mutual- 5827 Horseshoe Bar- flooring and G-Day Donut building.
- Most structures on Taylor Road between Walnut St. and Horseshoe Bar- all rebuilt shortly after 1915 fire.
- Nute/Barton Road house was built in 1891.
- Crossley/Turner cabin/barn- still upright were born way earlier than that

Economic Assets

Loomis has a small employment base, with the largest employers in the office and retail sectors. Loss of any of these employers would have an impact on employment opportunities within the Town and loss of associated tax revenue.

Growth and Development Trends

Since 1990, Loomis' population has increased by nearly 13 percent from 5,705 people to 6,427, based on 2000 Census data. However, Loomis is one of two cities within the County that

demonstrated negative population growth between 1999 and 2003. Loomis' growth rate is significantly lower than Placer County's growth which is estimated at 31 percent. In comparison to other cities in the County, Loomis has not experienced the same growth and thus has been able to retain a small town atmosphere.

Sacramento Council of Governments (SACOG) is responsible for determining future housing needs for a six county region, which includes Placer County. Based on SACOG's Regional Housing Needs Determination report for the 2001-2008 period, Loomis' state housing allocation is 493 units. This amounts to about 86 units built per year. Historically, Loomis has permitted 20 to 25 units per year.

The 2006 Housing Element provides a description of land use designations and there respective percentages of the Loomis Planning Area, an inventory of vacant land, and the development capacity of high density parcels greater than 0.5 acres, as shown in Figures D.3, D.4, and D.5 that follow.

Figure D.3 Town of Loomis General Plan Land Use Designations

Land Use Designation	Corresponding Zoning District	Percent of Land Area
Residential Agricultural	RA	58%
Residential Estate	RE	11%
Rural Residential	RR	Approximately 7%
Residential Low-Density	RS	Minimal
Residential-Medium Density	RS	Unknown
Residential-Medium-High Density	RM	2%
Residential-High Density	RH	One built-out area
Office and Professional	CO	0.6%
General Commercial	CG	Select areas outside of
		downtown core
Town Center Commercial	CC	Small area in downtown
		core
Tourist/Destination Commercial	CT	3%

Source: Town of Loomis General Plan

Figure D.4 Town of Loomis Vacant Land Inventory

Zone	Parcels	Acres	Average Area (Acres)	Range of Parcel Size	Max dwelling units per acre	Max Capacity (units)	Adjusted Max Capacity (units)
RR	34	68.7	2.0		1	69	55
RS-20	4	2.6	0.6	0.42-1.18	2	5	4
RE	42	165.9	3.9	0.34-23.11	0.43	72	58
RS-10	26	38.9	1.5	0.08-20.65	4	156	
RA	98	595.7	6.1	0.11-181.87	0.22	130	104
RS-5	15	27.3	1.8	0.09-22.44	6	164	131
Subtotal Low Density	219	899.0	4.1	N/A	N/A	595	476
RM-3.5	4	5.1	1.3	0.23-2.39	10	51	41
CG	18	36.9	2.0	0.23-7.34	10	369	295
co	3	13.8	4.6	0.71-6.70	10	138	110
CT	8	78.9	9.9	0.35-31.05	10;	789	631
cc	9	3.8	0.4	0.21-1.22	15	57	45
Subtotal High Density	42	138.5	3.3	N/A	N/A	1403	1123
Totals	261	1,037.5	4.0	N/A		1,998	1,599

Notes: Adjusted Max Capacity is calculated at 80% of capacity.

This table does not include potential second units and/or carriage houses.

The maximum density in Residential Estate (RE) is one dwelling unit per 2.3.

The maximum density in Residential Agriculture (RA) is one dwelling unit per 4.6 acres.

Multi-family housing in mixed-use development is permitted by right in all commercial districts. (See

discussion of mixed-use development in Section 4.)

Source: Town of Loomis

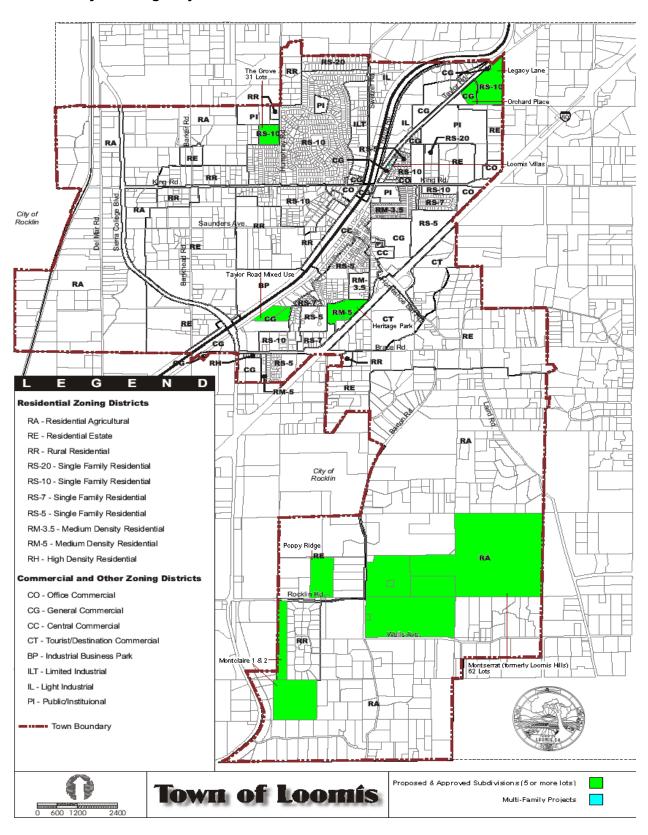
Figure D.5 Town of Loomis Development Capacity of High Density Parcels ≥ 0.5 Acres

Zone	Number of Parcels Greater than 0.5 acre	Acres	Max dwelling units per acre	Max Capacity (units)	Adjusted Max Capacity (units)
RM-3.5	2	4.7	10	47	38
CG	12	34.6	10	346	277
CO	3	13.8	10	138	110
CT	7	78.5	10	785	628
CC	4	2.9	15	44	35
Totals	28	134.5	N/A	1,360	1,088

Source: Town of Loomis

Figure D.6 on the following page illustrates those areas in Loomis that are either proposed or approved for new subdivisions and multi-family housing projects.

Figure D.6. Town of Loomis: Proposed and Approved Subdivisions (5 or more lots) and Multi-Family Housing Projects



More general information on growth and development in Placer County as a whole can be found in "Growth and Development Trends" in Section 4.3.1 Placer County Vulnerability and Assets at Risk of the main plan.

D.3.2 Estimating Potential Losses

Table D.6 above shows Loomis' exposure to hazards in terms of number and value of total structures. Placer County assessor's data was used to calculate the improved value of parcels. Generally, the most vulnerable structures are those in the floodplain or WUI areas, unreinforced masonry buildings, and buildings built prior to the introduction of modern day building codes. Impacts of past events and vulnerability to specific hazards are further discussed below (see Section 4.1 Hazard Identification for more detailed information about these hazards and their impacts on Placer County).

Flood

Loomis is traversed by several stream systems and is at risk to both the 100-year flood as well as to localized stormwater flooding. The Safety Element of Loomis' General Plan notes that flooding has been a minor hazard because of the Town's relatively elevated location compared to downstream localities. However, the 1998 Flood Insurance Rate Map does identify portions of Loomis that could be inundated in the event of 100- and 500-year floods from several creeks that flow through the Town (Antelope Creek, Secret Ravine, and Sucker Creek and their tributaries).

Local drainage problems exist because of inadequately-sized culverts and bridges that impede high water flows, including culverts under Interstate 80; the Horseshoe Bar Road crossing over Secret Ravine; the railroad and Taylor Road crossing of Sucker Ravine; and crossings of Antelope Creek and its tributaries. In the 1995 floods, local flooding did cause damage to the floors of a few buildings. Most recently, the 2005 New Years Eve flooding created significant problems in various areas of the Town.

Values at Risk

The Town of Loomis uses FEMA's Flood Insurance Rate Map (FIRM) information to assess flood risk (100- and 500-year flood) and infrastructure mitigation. Based on analysis of FIRM map information and Placer County Assessor's data, Tables D.6 and D.7 summarize the values at risk in the Town's floodplain. Table D.6 shows the count and improved value of parcels that fall in the 100-year flood zone, 500-year flood zone, and Zone X (all remaining areas outside of 100-year and 500-year floodplains) by property type.

Table D.6. Count and Improved Value of Parcels in Floodplain by Type of Flood—Town of Loomis

	100-y	ear flood	500-	ear flood	Z	Zone X
Property Type	# of parcels	structure value	# of parcels	structure value	# of parcels	structure value
Agriculture	-	-	-	-	2	\$0
Commercial	1	\$0	-	-	143	\$53,709,020
Industrial	-	-	-	-	122	\$33,702,117
Miscellaneous	9	\$0	2	\$0	342	\$2,247,399
Open Space	-	-	-	-	7	\$306,000
Residential	93	\$14,569,675	30	\$4,172,806	2,179	\$400,990,480
Total	103	\$14,569,675	32	\$4,172,806	2,795	\$490,955,016

Sources: 2007 Certified Roll Values, Placer County Assessor's Office; Digital Flood Insurance Rate Map Placer County, California and Incorporated Areas, 2007, FEMA

Based on this analysis, the Town of Loomis has moderate risk to 100-year and larger floods. Residential parcels have the highest scale of risk, accounting for 93 of the 103 total parcels and 100 percent of the structure value potentially affected by a 100-year flood. Table D.7 shows the number of parcels, structure value, contents value and total loss estimate for a 100-year flood, 500-year flood, and 100- and 500-year flood zones combined. The loss estimate is derived by assuming 20 percent of total value (structure value plus contents value) will be lost in the event of flooding impacts.

Table D.7. Placer County Flood Loss Estimates—Town of Loomis

	Parcels	Structure Value	Estimated Contents Value	Total Value	Loss Estimate
100-year flood	103	\$14,569,675	\$7,284,838	\$21,854,513	\$4,370,903
500-year flood	32	\$4,172,806	\$2,086,403	\$6,259,209	\$1,251,842
Total	135	\$18,742,481	\$9,371,241	\$28,113,722	\$5,622,744

Sources: 2007 Certified Roll Values, Placer County Assessor's Office; Digital Flood Insurance Rate Map Placer County, California and Incorporated Areas, 2007, FEMA

The analysis in Table D.7 shows that the majority of potential losses in the Town of Loomis are likely to occur in the 100-year flood zone, the zone with the highest probability of flooding occurrence. Applying the 20 percent damage factor as described in Section 4.3.2, there is a 1 percent chance in any given year of a 100-year flood causing roughly \$4.3 million in damage in the Town of Loomis. The additional damage caused by a 500-year flood (.2 percent chance in any given year) is \$1.2 million. Limitations of this model may include structures in the floodplains that are elevated at or above the level of the base-flood elevation, which will likely mitigate flood damage. Also, the assessed values are well below the actual market values. Thus, the actual value of assets at risk may be significantly higher than those included herein. Following the methodology described in Section 4.3.2 Vulnerability of Placer County to Specific

Hazards and in Table 4.38, Figure D.7 on the following page shows potentially affected areas in the Town of Loomis as a result of 100-year or 500-year floods.

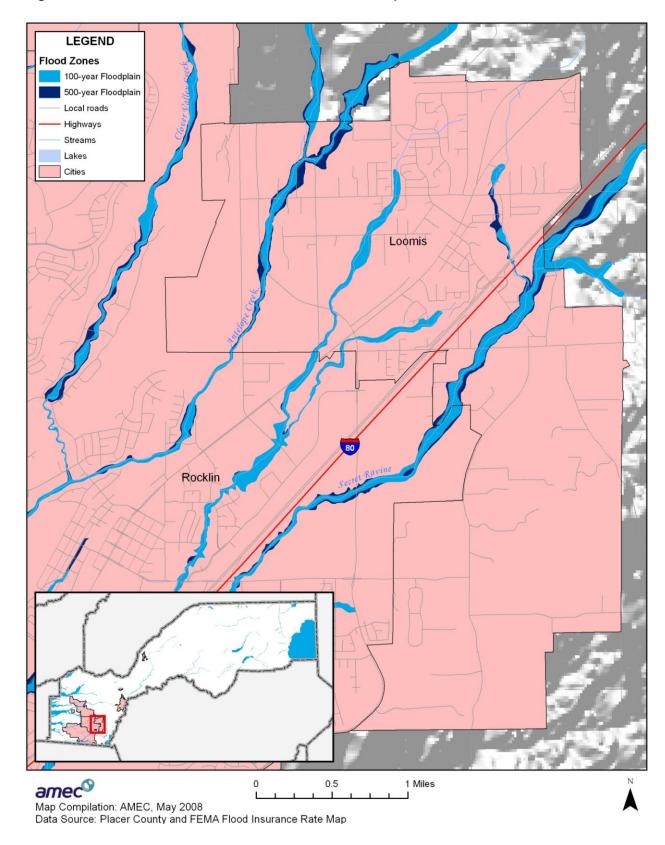


Figure D.7. Town of Loomis' 100- and 500-Year Floodplains

Population at Risk

Based on information from HAZUS-MH (Census 2000) and the digital flood insurance rate map, the Town of Loomis has 255 persons residing in 100-year flood zones, or 4.1 percent of the Town's population. An additional 80 persons reside in the 500-year floodplain, or roughly 1.3 percent of the Town's population.

Critical Facilities at Risk

Critical facilities are those community components that are most needed to withstand the impacts of disaster as previously described. There are no critical facilities located in either the 100- or 500-year floodplains.

Insurance Coverage, Claims Paid, and Repetitive Losses

The Town of Loomis joined the National Flood Insurance Program (NFIP) on December 29, 1986. The Town does not participate in CRS. Table D.8 identifies the existing FIRM maps within the Town limits. A more detailed description and summary of the flood zones is provided in Section 4.3.2 of the base plan in Table 4.38.

Table D.8. FIRMs for NFIP Community #06061C0—Town of Loomis

Map Number	Effective Date
06061C0412F	06/08/1998
06061C0414F	06/08/1998
06061C0416F	06/08/1998
06061C0418F	06/08/1998
06061C0481G	11/21/2001
06061CINDO	11/21/2001

Source: FEMA

NFIP Insurance data indicates that as of October 30, 2007, there were 68 flood insurance policies in force in the Town with \$16,116,200 of coverage. Of the 68 policies, 63 were residential and 5 were nonresidential; 31 of the policies were in A zones (the remaining 37 were in B, C, and X zones). The GIS parcel analysis detailed above identified 103 parcels in the 100-year flood zone. 31 policies for 103 parcels in the 100 year floodplain equates to insurance coverage of 30.1 percent.

There have been 10 historical claims for flood losses totaling \$362,690; seven of these were for policies located in the A zones and 3 were associated with standard policies located in B, C, or X zones. 9 of these were for pre-FIRM structures; 1 was for a post-FIRM structure. NFIP data further indicates that there are four repetitive loss (RL) buildings, with three RL buildings being insured. There have been a total of 8 RL losses, with 6 insured RL losses. Three of the four RL

buildings are located within the 100- and 500-year floodplain and the other one RL building is located outside the 100-and 500-year floodplain in the B, C, or X zones.

Localized Flooding/Severe Weather Areas

Flooding and other issues caused by severe weather events-primarily heavy rains and thunderstorms-can often pose a risk to the community. Primary concerns include impacts to infrastructure which provides a means of ingress and egress throughout the community. The Safety Element of the General Plan describes the localized flooding problem in Loomis as detailed below.

Inadequately-sized culverts and bridges can create impediments to the passage of high water flow in streams and gullies. Undersized infrastructure typically results in short-term back-ups behind the culvert or bridge, with pooling water in such areas, in effect, an unintended detention basin. Areas of potential concern in Loomis could include culverts under Interstate 80; the Horseshoe Bar Road crossing over Secret Ravine; the railroad and Taylor Road crossing of Sucker Ravine; and various crossings of Antelope Creek and its tributaries, at King Road, Sierra College Boulevard, and Del Mar Road. Various culverts and storm drains throughout the Town are also subject to potential flooding in the event that they become clogged with debris during heavy rains.

The Town of Loomis Specific Plan EIR identifies drainage problems associated with the culvert under the southbound freeway ramp of Interstate 80 into a poorly maintained swale near South Walnut Street. Other similar deficiencies are likely elsewhere, though none have been specifically identified in the available literature. During the heavy rain season of 1995, localized flooding was experienced on some low-lying properties near Secret Ravine and Antelope Creek, causing floor damage in some cases. In general, flooding occurred because of downstream blockages within flood channels or culverts.

Flood maintenance is an ongoing problem throughout Placer County. In Loomis, many of the major drainages are located on private property, and the Town generally does not have access to conduct maintenance operations to keep channels clear of debris. There is no clear responsibility regarding maintenance of drainages on private property (Town or property owners), though newer developments are required to include easements to facilitate maintenance. Nevertheless, this does not address existing deficiencies, which are experienced throughout the community.

Table D.9 identifies known and past occurrences of localized flooding areas and the associated problems encountered. Localized problems include flooding, washouts, sink holes, and downed trees. Many of the localized flood issues are associated with stormwater runoff and are discussed in detail the Town of Loomis' Drainage Master Plan Update, December 2007. This list is an initial inventory of key problem areas and is not intended to be a complete inventory of all problems and locations associated with severe weather events and localized flooding in the Town of Loomis.

Table D.9. Town of Loomis Localized Flooding Problem Areas

Area Name	Flooding	Pavement Deterioration	Washout	High Water	Landslide/ Mudslide	Sink Hole	Downed Trees
Brace Road	Х						Х
Brace Road Bridge	Х						Х
King Road Bridge	Х			Х			
Saunders Avenue		Х	Х				Х
Del Mar Avenue	Х	Х				Χ	
Secret Ravine							
Rutherford Road							Х
Sierra College Blvd.							Х
Sunrise Loomis Park							Х
Humprey Road	Х	Х	Х				
Magnolia/South Holly	Х						
Circle Drive	Х						
Sierra College Boulevard @ Antelope Creek	Х						
Sierra College Boulevard @ Bankhead (Sucker Ravine)	Х						
King Road @ Lucky Lane (Antelope Creek)	X						
King Road @ Humphery (Sucker Ravine)	Х						
Humphery Road @ both bridges near Town Limit	Х						
Rachael Lane @ PCWA Canal Inlet	Х						
Sun Knoll Drive @ PCWA Canal outlet	Х						
Horseshoe Bar Road @ Secret Ravine	Х						
Brace Road @ Secret Ravine	Х						
Wells Avenue @ Rickety Rack (Boardman Canal)	Х						

Area Name	Flooding	Pavement Deterioration	Washout	High Water	Landslide/ Mudslide	Sink Hole	Downed Trees
Barton Road @ Shambaugh (Boardman Canal)	Х						
Sparas Concrete lined ditch, @Kathy Way, Arcadia & Sparas	Х						
Oak Street / Magnolia Street	Х						

Source: Town of Loomis

Severe Weather: Heavy Rain/Thunderstorm/Hail/Lightning

According to historical hazard data, severe weather is an annual occurrence in the Town of Loomis. Damage and disaster declarations related to severe weather have occurred and can be expected to occur in the future. Heavy rain and thunderstorms are the most frequent type of severe weather occurrence in the area. Wind and lightning often accompany these storms and have caused damage in the past. Problems associated with the primary effects of severe weather include flooding, pavement deterioration, washouts, high water crossings, landslide/mudslides, debris flows, and downed trees. Table D.9 presented above in the discussion of the flood hazard details those areas within the Town that are most often affected during these heavy storm events.

Wildfire

According to the Safety Element of the General Plan, two types of fires are of concern to the Town of Loomis: wildland (including wildland urban interface) fires and structural fires. The topography, climate, and vegetation of Loomis are conducive to the spread of wildland fires. It contains extensive grasslands and oak woodlands in rolling terrain. The area is subject to hot, dry summers, with frequent wind gusts. However, prolonged summer heat spells often induce the delta breeze, a moist, cooling wind that temporarily reduces the high fire hazard condition common during the summer months.

Although small grass fires are common in the planning area, they have historically been limited in size by prompt emergency response. In 2002 the town was impacted by the Sierra Fire which burned 900 acres, including six structures. More than 100 homes were evacuated and over 1,000 homes were threatened in both Loomis and Granite Bay. The structural fire hazard, caused largely by human activities, is greatest in areas containing older buildings that do not meet current building codes.

Following the methodology described in Section 4.3.2 Vulnerability of Placer County to Specific Hazards, a wildfire map for the Town of Loomis was created (see Figure D.8). Wildfire threat within the town is predominately moderate with a small area along the middle of the Town's western boundary being a high wildfire threat.

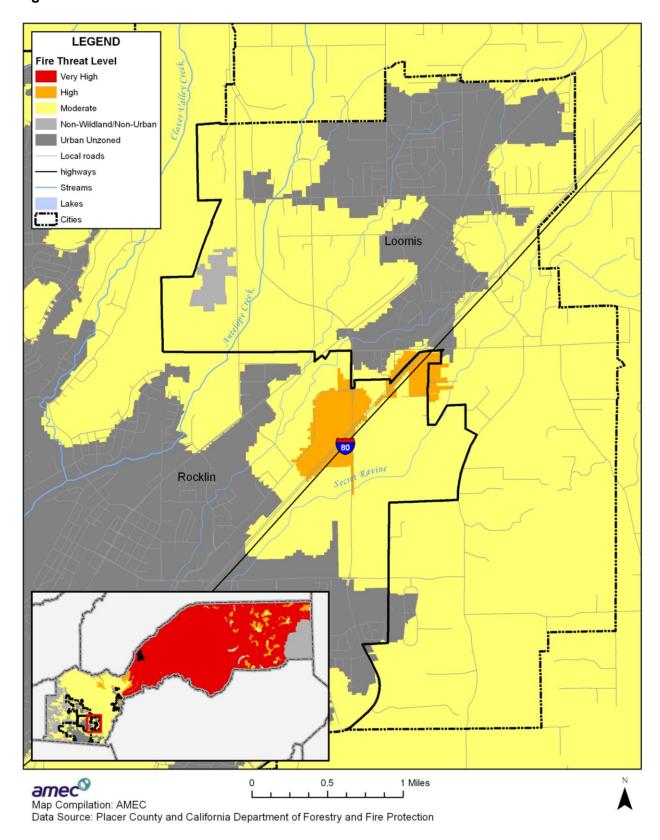


Figure D.8. Town of Loomis Wildfire Threat

Values at Risk

Once the number of parcels and their values were determined, contents values were estimated (based on 50 percent of the assessed value) to determine total values at risk by hazard zone. Overlaying the fire hazard severity zone map with the County parcel layer, it is evident that the Town of Loomis has significant assets at risk to wildfire as detailed in Tables D.10-D12. Of the 2,930 total parcels in the Town of Loomis, 496 or 17 percent are unimproved and thus do not have structures that would be damaged.

Table D.10. Values at Risk from Wildfire by Fire Hazard Severity Zone—Town of Loomis

	M	oderate		High	Urba	n Unzoned		ildland / Non- Urban
Property Type	parcels	structure value						
Agriculture	2	\$0	-	-	-	-	-	-
Commercial	46	\$26,136,342	-	-	98	\$27,572,678	-	-
Industrial	8	\$1,958,566	-	-	114	\$31,743,551	-	-
Miscellaneous	242	\$900,610	5	\$0	104	\$1,257,617	2	\$89,172
Open Space	4	\$306,000	1	\$0	2	\$0	-	-
Residential	970	\$233,135,102	32	\$6,136,768	1,297	\$179,985,417	3	\$475,674
Total	1,272	\$262,436,620	38	\$6,136,768	1,615	\$240,559,263	5	\$564,846

Source: Placer County and California Department of Forestry and Fire Protection; data analysis AMEC

Note: Zero (0) values may indicate missing data or non-calculated amounts

Table D.11. Total Values at Risk from Wildfire —Town of Loomis

Fire Hazard Zone	Parcels	Structure Value	Estimated Contents Value	Total Value
Moderate	1,272	\$262,436,620	\$131,218,310	\$393,654,930
High	38	\$6,136,768	\$3,068,384	\$9,205,152
Very High	-	-	-	-
Urban-unzoned	1,615	\$240,559,263	\$120,279,632	\$360,838,895
Non-wildland/non-urban	5	\$564,846	\$282,423	\$847,269

Source: Placer County and California Department of Forestry and Fire Protection; data analysis AMEC

Populations at Risk

Wildfire risk is of greatest concern to populations residing in the moderate, high, and very high wildfire hazard zones. Following the methodology described in Section 4.3.2 Vulnerability of Placer County to Specific Hazards, Table D.12 provides an estimate of populations residing within the various wildfire hazard severity zones.

Table D.12. Town of Loomis Populations at Risk by Wildfire Threat Level

Town	Moderate	High	Very High	Urban Unzoned	Non-wildland/non-urban	Totals
Loomis	2,817	3	0	3,221	23	6,064

Source: Placer County and California Department of Forestry and Fire Protection; data analysis AMEC

Critical Facilities at Risk

Critical facilities are those community components that are most needed to withstand the impacts of disaster as previously described. There are no critical facilities in either the high or very high hazard zones in the Town of Loomis.

Other Hazards

Although ranked of lower planning significance relative to other hazards, the following information about dam failure, earthquake, and severe weather: heavy rain/thunderstorm/hail/lightning should still be noted:

Dam Failure

Loomis is not in the dam inundation area for any major stream or river in the region. There are no dams or reservoirs (except small local detention facilities) upstream of Loomis on any tributary of Antelope Creek or Secret Ravine. Loomis is not subject to potential damage from dam inundation.

Earthquake

Placer County is traversed by a series of northwest trending-faults that are related to the Sierra Nevada uplift. The Foothills Fault System's Cleveland Hills Fault was the source of the 1975 Oroville earthquake (Richter magnitude: 5.7). The Safety Element notes that two segments of this fault system are relatively close to Loomis: the segment of the Bear Mountain Fault, and the Melones Fault Zone, about 15 miles to the east. Because of their close proximity, earthquakes on these faults could have the greatest potential for damaging buildings in Loomis, especially those constructed before earthquake resistant requirements were included in local building codes. The Safety Element also notes that an inferred inactive fault was mapped near Loomis' southern boundary.

Ground shaking is the major earthquake hazard because of the Town's location, primarily on alluvial deposits, especially along the creeks and ravines in the northern part of the Town. Parts of Loomis may experience earthquake-related ground failures, such as liquefaction, minor subsidence, lurch cracking, and lateral spreading. Older buildings constructed before codes were in effect are most likely to suffer damage in an earthquake. Many of Loomis' buildings are one or two stories high, and of wood frame construction, which is considered relatively resistant to earthquake damage. Unreinforced masonry buildings are the most susceptible. Several unreinforced masonry buildings exist in the old downtown area. In addition, several downtown buildings have brick facades which are also susceptible to damage from an earthquake.

Additionally, Loomis may experience ground shaking from distant major to great earthquakes on faults to the west and east. For example, to the west, both the San Andreas Fault (source of the 8.0 estimated Richter magnitude San Francisco earthquake that damaged Sacramento in 1906)

and the closer Hayward fault have the potential for experiencing major to great events. Another potential earthquake source is the Midland Fault Zone (Dunnigan Hills Fault) to the west, where in 1892 an earthquake centered between Vacaville and Winters caused minor structural damage in nearby communities. To the east in Nevada, the several faults associated with a series of earthquakes in 1954, especially the source of the major (7.1 Richter magnitude) December 16, 1954 Fairview Peak earthquake (about 100 miles east of Carson City) could cause ground shaking in Loomis.

Severe Weather: Heavy Rain/Thunderstorm/Hail/Lightning

According to historical hazard data, severe weather is an annual occurrence in the Town of Loomis. Damage and disaster declarations related to severe weather have occurred and will continue to occur in the future. Heavy rain and thunderstorms are the most frequent type of severe weather occurrence in the area. Wind and lightning often accompany these storms and have caused damage in the past. Problems associated with the primary effects of severe weather include flooding, pavement deterioration, washouts, high water crossings, debris flows, and downed trees. Table D.9 presented above in the discussion of the flood hazard details those areas within the Town that are most often affected during these heavy storm events.

D.4 Capability Assessment

Capabilities are the programs and policies currently in use to reduce hazard impacts or that could be used to implement hazard mitigation activities. This capabilities assessment is divided into five sections: regulatory mitigation capabilities, administrative and technical mitigation capabilities, fiscal mitigation capabilities, mitigation outreach and partnerships, and other mitigation efforts.

D.4.1 Regulatory Mitigation Capabilities

Table D.13 lists regulatory mitigation capabilities, including planning and land management tools, typically used by local jurisdictions to implement hazard mitigation activities and indicates those that are in place in the Town of Loomis.

Table D.13. Town of Loomis' Regulatory Mitigation Capabilities

Regulatory Tool	Y/N	Comments
General plan	Yes	
Zoning ordinance	Yes	
Subdivision ordinance	Yes	
Growth management ordinance	No	
Floodplain ordinance	Yes	
Other special purpose ordinance (stormwater, steep slope, wildfire)	Yes	
Building code	Yes	Version 1997 UBC

Regulatory Tool	Y/N	Comments
BCEGS Rating	Yes	
Fire department ISO rating	N/A	Loomis Fire not operated by Town
Erosion or sediment control program	Yes	
Stormwater management program	Yes	
Site plan review requirements	Yes	Performed by Each Town Dep't
Capital improvements plan	Yes	
Economic development plan		
Local emergency operations plan	Yes	
Other special plans		
Flood insurance study or other engineering study for streams	Yes	
Elevation certificates	Yes	
Other		

Source: Town of Loomis

As indicated above, the Town has several programs, plans, policies, codes and ordinances in place and/or that they follow. The General Plan for the Town of Loomis is the most comprehensive. The following section provides an overview of the General Plan and identifies specific policies related to hazard mitigation that are included in the plan.

The Town of Loomis General Plan Program, 2001

The Town of Loomis General Plan Program serves as the blueprint for future growth and development and provides comprehensive planning for the future. It encompasses what the Town is now, and what it intends to be, and provides the overall framework of how to achieve this future condition (see the discussion in Section 4.3.1 Growth and Development Trends).

The general plan includes a Safety Element that focuses on safety issues to be considered in planning for the present and future development of the Loomis Planning Area. Identified hazards include fire, geologic/seismic, flooding, and hazardous materials. Mitigation-related issues, goals, policies, and actions are presented below.

	Issues
Issue 1:	The rural nature of the community and presence of large open space parcels increases the Town's risk of wildland and fire hazards at the urban edge.
Issue 2:	A number of properties along local creeks have been flooded during winter storms, despite flood preventative measures.

	Goals
Goal 1:	To reduce the risks associated with wildland and urban edge fires in the Town's rural areas.
Goal 2:	To reduce the risks associated with wildland and urban edge fires in the Town's rural areas.
Goal 3:	To reduce the potential for and damage resulting from storm flooding hazards within the community.
Goal 4:	To reduce the risks associated with potential seismic activity, including groundshaking, liquefaction,

	Goals	
and landslides.		

	Policies
Policy 1:	Loomis shall enforce building codes and other Town ordinances having an effect upon fire hazards and fire protection. The Town shall maintain adequate street widths and turning radii to accommodate fire protection equipment. New development shall ensure adequate water pressure and volume for fire fighting.
Policy 2:	Engineering analysis of new development proposals shall be required in areas with possible soil instability, flooding, earthquake faults, or other hazards, and prohibit development in high danger areas.
Policy 3:	Loomis shall comply with Placer County's Emergency Response Plan, as well as revise the Town Emergency Plan to address Town-specific issues.
Policy 4:	No new structures or additions to existing structures shall be permitted in areas identified by the federal Flood Insurance Rate Maps (FIRMs) or the Town Engineer as being subject to innundation in a 100-year or more frequent flood event. Exceptions may be granted for public facilities and utilities. New development shall also be prohibited in the future 100-year flood zone, based on buildout conditions as determined by FEMA and FIRM maps. Development will be required to adhere to Placer County Flood Control District policies and the Dry Creek Watershed Control Plan.
Policy 5:	New development near stream channels shall be designed so that reduced stream capacity, stream bank erosion, or adverse impacts on habitat values are avoided.
Policy 6:	Further channelization and/or banking of creeks or streams within the planning area shall be discouraged, unless no other alternative is available to minimize flood risk. Setbacks from flood sources shall be the preferred method of avoiding impacts.
Policy 7:	Site-specific recommendations of the Town's Drainage Master Plan, upon completion, shall be applied to individual development projects as appropriate.
Policy 8:	Loomis shall cooperate with Federal, State, and local authorities to ensure that loss due to seismic activity and other natural and man-made disasters is minimized.
Policy 9:	Loomis shall encourage compliance with State requirements for unreinforced masonry buildings and seismic safety.
Policy 10:	Loomis shall continue to train and equip Town personnel to cope with emergency disaster situations, including hazardous material incidents.
Policy 11:	A Street Address Ordinance shall be adopted to assist effective emergency response by requiring adequate street address identification.
Policy 12:	Application materials for residential subdivisions proposed within or near oak woodlands shall include Wildland fire protection plans showing how vegetation clearance will be maintained around structures while preserving oak trees.

D.4.2 Administrative/Technical Mitigation Capabilities

Table D.14 identifies the personnel responsible for activities related to mitigation and loss prevention in Loomis.

Table D.14. Town of Loomis' Administrative and Technical Mitigation Capabilities

Personnel Resources	Yes/No	Department/Position
Planner/Engineer with knowledge of land development/land	Yes	Planning/Engineering
management practices		

Personnel Resources	Yes/No	Department/Position
Engineer/Professional trained in construction practices related to buildings and/or infrastructure	Yes	Engineering
Planner/Engineer/Scientist with an understanding of natural hazards	No	
Personnel skilled in GIS	No	
Full time building official	No	
Floodplain Manager	Yes	Public Works Director
Emergency Manager	Yes	Public Works Director
Grant writer	No	
Other personnel	No	
GIS Data – Hazard areas	No	
GIS Data - Critical facilities	No	
GIS Data – Building footprints	No	
GIS Data – Land use	No	
GIS Data – Links to Assessor's data	No	
Warning Systems/Services (Reverse 9-11, cable override, outdoor warning signals)	No	
Other		

Source: Town of Loomis

D.4.3 Fiscal Mitigation Capabilities

Table D.15 identifies financial tools or resources that the Town could potentially use to help fund mitigation activities.

Table D.15. Town of Loomis' Fiscal Mitigation Capabilities

Financial Resources	Accessible/Eligible to Use (Yes/No)
Community Development Block Grants	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
Fees for water, sewer, gas, or electric services	No
Impact fees for new development	Yes
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activities	Yes
Withhold spending in hazard prone areas	Yes

Source: Town of Loomis

D.4.4 Mitigation Outreach and Partnerships

Town of Loomis Code Enforcement works with the Loomis Fire Department to notify and remind residents and businesses within Loomis to provide the required fire protection buffer zone. The Town and Fire Department mail out letters to all that are in violation. Within this letter sections 7.04.010 - 7.04.190 of the Loomis Code are referenced.

D.4.5 Other Mitigation Efforts

The Town of Loomis has many other ongoing mitigation efforts that include the following:

• In 2000-2001 the Town replaced all old street signs with new larger and more reflective signs. The Town's construction standard was also changed so that all new developments within town are built to this standard. By increasing the size of lettering and requiring them to be made with a high intensity back ground will help emergency responders.

D.5 Mitigation Strategy

D.5.1 Mitigation Goals and Objectives

The Town of Loomis adopts the hazard mitigation goals and objectives developed by the HMPC and described in Chapter 5 Mitigation Strategy.

D.5.2 NFIP Mitigation Strategy

The Town of Loomis currently participates in the National Flood Insurance Program (NFIP). Every two years the Town provides FEMA the required information to stay current in the program.

D.5.3 Mitigation Actions

The planning team for the Town of Loomis identified and prioritized the following mitigation actions based on the risk assessment. Background information and information on how each action will be implemented and administered, such as ideas for implementation, responsible office, potential funding, estimated cost, and timeline are also included.

1. Delmar Avenue Headwall Reconstruction

Issue/Background: Headwall has cracked vertically.

Other Alternatives:

Existing Planning Mechanism(s) through which Action Will Be Implemented: Get Engineers estimate and propose to Town Council.

Responsible Office: Town of Loomis

Priority (High, Medium, Low): Medium

Cost Estimate: \$80,000

Benefits (Losses Avoided): Road and Flood protection

Potential Funding: Town budgets, Grant funding

Schedule: 1-3 years

2. Creek Maintenance Secret Ravine & Antelope Creek

Issue/Background: During winter, debris blocks creek.

Other Alternatives:

Existing Planning Mechanism(s) through which Action Will Be Implemented: Get Engineers estimate and propose to Town Council.

Responsible Office: Town of Loomis

Priority (High, Medium, Low): Medium

Cost Estimate: Unknown

Benefits (Losses Avoided): Flood prevention

Potential Funding: Town budgets

Schedule: 1-3 years

3. Reconstruction of Brace Bridge at Secret Ravine

Issue/Background: Old bridge, not heavy truck rated. Creek has topped the bridge in the past due to flow restriction.

Other Alternatives:

Existing Planning Mechanism(s) through which Action Will Be Implemented: Get Engineers estimate and propose to Town Council.

Responsible Office: Town of Loomis

Priority (High, Medium, Low): High

Cost Estimate: \$200,000

Benefits (Losses Avoided): Road and Flood protection

Potential Funding: Town budgets, Grand funding

Schedule: 2010

4. Address Signage for Property Addresses

Issue/Background: Finding addresses on rural roads with no street lights.

Other Alternatives:

Existing Planning Mechanism(s) through which Action Will Be Implemented: Get engineers estimate and propose to Town Council.

Responsible Office: Town of Loomis

Priority (High, Medium, Low): Low

Cost Estimate: \$30,000

Benefits (Losses Avoided): Reduced loss of life.

Potential Funding: To be determined.

Schedule: To be determined.

5. Raise Flood-Prone Houses Along Loomis Creeks

Issue/Background: The Town has kept structure flooding data since 1984. Within the Town limits, there have been 16 homes and 4 buildings flooded in the 1986 flood and 10 homes flooded in the 1995 flood. All homes flooded in 1995 were flooded in 1986.

There are four significant creeks that flow north to south through Loomis; they are Antelope Creek, Sucker Ravine, Loomis Tributary and Secret Ravine. Antelope Creek is 9,000 feet long and runs along the west portion of the Town. The creek is a natural channel throughout Loomis. The creek crossed three important street systems (King Road, Sierra College Boulevard and Del Mar Road). There are three structures identified that are affected by flooding on Antelope Creek. Sucker Ravine is in the central portion of Loomis and is roughly 8,500 feet long. Flow in this system changes in character from the north to the south. The north area flow is gathered by

surface runoff near the railroad tracks and enters into pipe systems in the industrial area of Swetzer Road. The flow then runs within pipes and concrete channels within the Sunrise-Loomix Subdivision and enters a naturally lined channel north of King Road. Once the flow crosses King Road, the remaining channel to the south Town limit is natural. The creek also crosses Saunders Avenue, Sierra College Boulevard, Bankhead Road, and Taylor Road (within Rocklin). One structure is identified as being effected by flooding on Sucker Ravine. The Loomis tributary is 10,000 feet long and collects flow from the central portion of Loomis. The flow runs through several piped systems within subdivisions to the north and south of Horseshoe Bar Road. The other segments are natural channel. No flooding of structures have been identified on this tributary. Secret Ravine runs parallel with Highway 80 and is 6,000 feet in length. The creek is a natural channel with two major street crossings at Horseshoe Bar Road and Brace Road. Most of the flooding occurs on this creek system due to the building of structures along the banks. Sixteen structures have been identified as flood prone within Secret Ravine.

Under the Town's updated General Plan, no new structures are allowed to be built within the 100 year floodplain. Existing structures can only be raised or extended to a second story. All information is taken from the FEMA FIRMs. Proposed projects adjacent to the 100-year floodplain must submit to the Town a drainage study report evaluating the drainage and verifying the location of the 100-year floodplain. Larger projects may be required to submit to FEMA, a Letter of Map Revision (LOMR) to update or amend the 100-year floodplain should it be affected by the project.

Other Alternatives: Relocate the structures out of the 100-year floodplain; purchase the property, remove structure and designate it as open space. Purchase the structure/land within the 100-year floodplain, designate it as open space/detention and leave the remaining land for property owner to develop. Compensate property owner for removing structure and acquire a no-build easement of property within 100-year floodplain. No Action.

Existing Planning Mechanism(s) through which project will be implemented:

Responsible Office: Brian Fragiao, Director of Public Works/Town Engineer, Town of Loomis

Priority (High, Medium, Low): High

Cost Estimate: In 2009 dollars, there is roughly \$5 million dollars of structures within the flood prone areas. The cost of land was not factored into the calculation. Depending on the alternative that is used, the cost of construction and incidentals would need to be estimated at current dollar values.

Benefits (avoided Losses): With the cost of property and construction and material costs going up, the Town would alleviate much of the cost and flooding concerns by being proactive before future flooding occurs. Providing open space upstream of many of the effected properties may provide additional detention and relieve flooding downstream. As future development occurs in

Placer County, in the Town and in Rocklin, the Town of Loomis will need to look for areas to detain floodwaters. This mitigation action works towards flood control in the Town.

Potential funding: FEMA, Town of Loomis, Affected Property Owner

Schedule: TBD, depending on funding